AVI'S

IT TRAINING | CONSULTING

REAL PROJECT'S, REAL PEOPLE, REAL TIME

AVI'S
IT TRAINING | CONSULTING

Avinash Sunkara
(CEO, DigitX | Avi's IT)

He shares a belief that education goes beyond classrooms and certifications which is why he tarted Avis it trainings to help people in developing distinctive skill sets.

He solidly believes that the future belongs to those who can think, access, configure and implement end to end technologies.

Engagement has to be human, because people trust people

AVI'S
IT TRAINING | CONSULTING

About Avi's IT

avisit is the most credible organization where students can skill, upskill and reskill themselves.
With 5 years of experience, we have upended the technical education system by emphasizing on disruptive technologies. We have trained over 5000 students spanning across successfactors, Cloud DevOps, Salesforce and Full Stack, sap

Physical and Virtual

Classrooms Real-time Labs and Assignments Live Projects with Industry Partners

Job & Interview Assistance 24/7 Support & Mentorship Immediate Internships & Placements

AVI'S

IT TRAINING | CONSULTING

DON'T WORRY YOU ARE AT RIGHT PLACE

AVI'S
IT TRAINING | CONSULTING

Why Become a DATA SCIENCE

Can be learned by anyone

Our Full Stack course has precisely been developed to reach out to the demand of the learners with keeping in mind the industry standards.

Fancy salary packages Up

Professionalss are paid fairly well everywhere.

Easier access to jobs

The demand for Skilled Developers is higher but the supply is insufficient. So, getting a job soon after completing the course is pretty easier.

Fast Career Growth

Up-scaling yourself is a necessity, especially nowadays when technology is evolving at a rapid pace.

Become More Valuable To The Company

Most of the companies for cost optimisation purpose are looking for people with cutting- edge skills.

AVI'S
IT TRAINING | CONSULTING

5-Months Detailed Data Science Curriculum

Month 1: Basics of Python and High-School Level Mathematics

Duration: 4 weeks

Objectives:

- Understand the fundamentals of Python programming.
- Learn basic statistical analysis and mathematical concepts to support further data science studies.

Modules:

1. Introduction to Python

- Python Basics:
- Syntax, variables, and data types
- Control flow statements and loops
- Functions and Modules:
- Defining and using functions
- Importing and using modules
- Error Handling:
- Exception handling and debugging

2. Data Structures in Python

- Lists, Tuples, and Dictionaries:
- Creating and manipulating data structures
- Sets and Strings:
- Working with sets and string operations

AVI'S
IT TRAINING | CONSULTING

3. Basic Mathematics and Statistics

- Basic Algebra:
- Solving linear equations
- Understanding functions and graphs
- Basic Probability:
- Understanding probability concepts
- Calculating probabilities of simple events
- Basic Statistics:
- Understanding measures of central tendency and dispersion
- Interpreting data distributions

Month 2: Data Wrangling and Visualization with Python

Duration: 4 weeks

Objectives:

- Teach data wrangling and preprocessing techniques using Python libraries.
- Enable participants to visualize data using Python.

Modules:

1. Data Wrangling with Numpy and Pandas

- Introduction to Numpy:
- Arrays and vectorized operations
- Indexing, slicing, and reshaping
- Introduction to Pandas:
- Series and DataFrames
- Data cleaning and manipulation

AVI'S
IT TRAINING | CONSULTING

2. Advanced Data Wrangling Techniques
- Handling Missing Data:
- Identifying and imputing missing values
- Merging and Joining DataFrames:
- Concatenating and merging datasets
- GroupBy Operations:
- Aggregating data and applying functions

3. Data Visualization with Matplotlib and Seaborn
- Basic Plotting with Matplotlib:
- Creating and customizing plots
- Plot types (line, bar, scatter, histogram)
- Advanced Visualization with Seaborn:
- Statistical plots and customization
- Creating pair plots and heatmaps

Month 3: SQL for Data Management and Analysis

Duration: 4 weeks

Objectives:
- Provide a thorough understanding of relational databases and SQL.
- Enable participants to manage and manipulate data using SQL.

Modules:

1. Introduction to Database and RDBMS
- Basics of Databases:
- Understanding relational database management systems
- Database Design and Normalization:
- Designing efficient database schemas

AVI'S
IT TRAINING | CONSULTING

2. SQL Basics

- Data Definition Language (DDL):
- Creating and modifying database structures
- Data Manipulation Language (DML):
- Inserting, updating, and deleting data
- Data Query Language (DQL):
- Writing basic SQL queries
- Data Control Language (DCL) and Transaction Control Language (TCL):
- Managing permissions and transactions

3. Advanced SQL Techniques

- Joins and Subqueries:
- Combining data from multiple tables
- Writing complex subqueries
- Window Functions:
- Using window functions for advanced analysis
- Views and Indexes:
- Creating and using views
- Indexing for performance optimization

AVI'S
IT TRAINING | CONSULTING

Month 3-4: Machine Learning with Python

Duration: 4 weeks

Objectives:

- Introduce machine learning concepts and techniques.
- Teach participants to implement machine learning models using Python.

Modules:

1. Introduction to Machine Learning

- Supervised Learning:
- Regression and classification algorithms
- Unsupervised Learning:
- Clustering and dimensionality reduction

2. Data Preprocessing for Machine Learning

- Feature Engineering:
- Creating and selecting features
- Data Normalization and Standardization:
- Scaling and transforming data

3. Implementing Machine Learning Models

- Using Scikit-learn:
- Building and evaluating models
- Cross-validation and hyperparameter tuning
- Model Evaluation Metrics:
- Understanding accuracy, precision, recall, and F1-score

4. Advanced Machine Learning Techniques

- Ensemble Methods:
- Bagging, boosting, and stacking
- Model Deployment:
- Saving and loading models
- Deploying models for production use

Month 4: Natural Language Processing (NLP)

Duration: 2 weeks

Objectives:

- Introduce the basics of Natural Language Processing.
- Teach participants to implement NLP models using Python.

Modules:

1. Introduction to NLP

- Basic NLP Concepts:
- Tokenization, stemming, and lemmatization
- Text Preprocessing:
- Cleaning and preparing text data

2. Implementing NLP Models

- Text Classification:
- Building models for sentiment analysis
- Named Entity Recognition (NER):
- Identifying entities in text
- Topic Modeling:
- Using algorithms like LDA for topic extraction

AVI'S
IT TRAINING | CONSULTING

Month 4-5: Deep Learning and Artificial Intelligence

Duration: 5 weeks

Objectives:

- Introduce deep learning concepts and techniques.
- Teach participants to build and train neural networks using Python.

Modules:

1. Introduction to Deep Learning

- Basics of Neural Networks:
- Understanding perceptrons and multilayer networks
- Training Neural Networks:
- Backpropagation and gradient descent

2. Advanced Deep Learning Techniques

- Convolutional Neural Networks (CNNs):
- Image classification and object detection
- Recurrent Neural Networks (RNNs):
- Sequence modeling and text generation

3. Implementing Deep Learning Models

- Using TensorFlow and Keras:
- Building and training models
- Hyperparameter tuning and optimization

4. Applications of AI

- AI in Various Domains:
- Healthcare, finance, and other industries
- Ethical Considerations:
- Addressing ethical issues in AI

AVI'S
IT TRAINING | CONSULTING

Month 5: Data Visualization with Tableau and Integration of Tools

Duration: 4 weeks

Objectives:

- Teach data import, modeling, and visualization using Tableau.
- Integrate Python, SQL, and Tableau for comprehensive data analysis.

Modules:

1. Data Visualization using Tableau

- Introduction to Tableau:
- Connecting to different data sources
- Basic and advanced chart types
- Data Transformation and Preparation:
- Cleaning and preparing data for visualization

2. Advanced Tableau Techniques

- Calculated Fields and Parameters:
- Creating dynamic calculations
- Joins and Data Blending:
- Combining data from multiple sources
- Actions and Filters:
- Adding interactivity to visualizations

3. Dashboards and Storytelling with Tableau

- Designing Effective Dashboards:
- Principles of good dashboard design
- Interactive Visualizations:
- Creating interactive elements
- Storytelling with Data:
- Crafting compelling data stories

AVI'S
IT TRAINING | CONSULTING

4. Integration of Python, SQL, and Tableau

- Connecting Python and SQL:
- Using SQL queries in Python
- Data extraction and manipulation
- Visualization and Interpretation in Tableau:
- Importing and connecting datasets from SQL and Python
- Advanced visualization techniques

Come and chat with us about your goals over a cup of coffee

AVI'S

IT TRAINING | CONSULTING

CORPORATE OFFICE

1-98/9/25/p, Jai Hind Gandhi Rd, VIP Hills,
Jaihind Enclave, Madhapur, Hyderabad, Telangana 500081.

TRAINING OFFICE

Ayyappa Society, Beside Hitech Bawarchi, Opp IOC Petrol Pump Lane, Madhapur, Megha Hills, Sri Sai Nagar, Madhapur, Telangana 500008.

ENQUIRE NOW

TALK TO US

+91 9951321218 | 889764799

info@avisit.in | www.avisit.in